

U.S. Patent Application Serial No. 09/810,844
Reply to Office Action dated February 15, 2005

REMARKS

Claims 3-7 are amended. The amendments to claims 3-7, reciting "said fingerprint identifier and said hard disk is integrated" are supported on Page 1, Lines 15-17, and Page 1 Lines 20-22.

As mentioned in the Specification on page 1, the problem to be solved by the invention is that the data can be read easily if the hard disk is removed and installed in other computers in the prior art. In order to solve the problem, the invention provides as its object a fingerprint hardware used for securing the data information by incorporating organically a fingerprint identifier with the original hardware. That means, the invention requires to integration of a finger identifier with a hard disk as a single unit. In other words, if the finger identifier were separable from the hard disk, it would be still possible to individually remove the hard disk to another computer and illegally readout the data from the hard disk.

Therefore, the amendments to claims 3-7 have not introduced any new matters with respect to the originally-filed application.

The objections raised by the Examiner in the Final Office Action are addressed by the amended claims and the following remarks.

Claim 3 was rejected as being unpatentable over Holehan (US Patent 6,337,918) in view of Brown (US Patent 5,859,968).

The Examiner notes that a fingerprint identifier for identifying whether the user's fingerprint is qualified [column 5, lines 15-24] and a hard disk comprising a hard disk body and a hard disk control device [column 5, lines 24-33, and Figs. 3] is taught by Holehan. In such a structure as mentioned by the Examiner, the combination of the system interface I/O

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controller 42, the touchpad controller 56 and the fingerprint database ROM 46 is compared to the fingerprint identifier of the amended claim 3 while the combination of the hard drive 48 and the controller 50 is compared to a hard disk of the amended claim 3. However, in Holehan, the system interface I/O controller 42 is an interior part of a computer system and it is not removable from the computer system. In other words, the hard disk (units 48 and 50) is removable from the system interface I/O controller 42 and thus is separable from the fingerprint identifier (units 42, 46 and 56). That means, when the hard disk (units 48 and 50) is removed from the computer system and installed into another computer system, the data stored in hard disk can also be readout. Holehan provides no suggestions or teachings that the fingerprint identifier and the hard disk are integrated.

The amended claim 3 requires that the fingerprint identifier and the hard disk are integrated. Since the fingerprint identifier and the hard disk are integrated as a signal unit, the fingerprint identifier and the hard disk are not separable and must be removed together. When the inventive fingerprint hard disk is removed from a computer system to another computer system, the fingerprint hard disk will not be illegally readout.

Brown also does not provide any suggestions or teachings that the fingerprint identifier and the hard disk are integrated.

The Examiner notes that connecting a power supply, an electronic controlled switch, hard disk and an access control interface (fingerprint identifier) is taught by Brown. In Brown, an access controller 12 is connected between a power supply 46 and an external data drive (26, 30, 34) to allow or prevent the addition and removal of the information from the computer system using the external data drive (See Fig. 3 Column 2, Lines 5-14). In such a connection, said external data drive (26, 30, 34) can only be considered as a hard disk rather than a hard disk body which is internal to the hard disk as a part. When an access controller 12 is compared to an electric controlled switch, Brown at most teaches

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that the access controller 12 is connected between a power supply interface of a hard drive and a power supply. Since the connection between a power supply interface of a hard drive and a power supply is outside the hard drive, the access controller 12 is used to control the connection outside the hard disk. Brown has no suggestions or teachings that the access controller 12 is used to control the connection inside the hard disk. More specifically, Brown has no suggestions or teachings that the access controller 12 is used to control the connection between the hard disk body and the power supply interface both of which are internal to the hard disk.

The amended claim 3 requires that the control interface of the fingerprint identifier and the power supply and the power supply interface of the hard disk both are connected with the hard disk body through the electric controlled switch. In this structure, the electric controlled switch is used to control the connection between the hard disk body and the power supply interface both of which are internal to the hard disk.

The amended claim 4 is distinguished from the amended claim 3 in the feature that the signal interface of the hard disk is connected with the hard disk body through the electric controlled switch. The above comments for the amended claim 3 similarly apply to the amended claim 4, as applied to the "signal interface" versus the "power supply interface".

More specifically, neither Holehan nor Brown does provide any suggestions or teachings that the fingerprint identifier and the hard disk are integrated. Brown has no suggestions or teachings that the access controller 12 is used to control the connection between the hard disk body and the signal interface both of which are internal to the hard disk.

The amended claims 5-7 requires that the fingerprint identifier and the hard disk are integrated; the hard disk body further comprises a disk cavity and a control board; the disk

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cavity is connected with the control board through a magnetic head signal wire, a step motor control wire and a rotary motor control wire, and the control interface of the fingerprint identifier is connected to one of the magnetic head signal wire, the step motor control wire and the rotary motor control wire through the electric controlled switch. The amended claims 5-7 uses an electric controlled switch to control the connection which is internal to the hard disk body (Please note that the amended claims 3 and 4 uses an electric controlled switch to control the connection which is internal to the hard disk).

Neither Holehan nor Brown does provide any suggestions or teachings that the fingerprint identifier and the hard disk are integrated. Furthermore, Brown has no suggestions or teachings that the access controller 12 is used to control the connection between the disk cavity and the control board both of which are internal to the hard disk body.

Claims 8-13 and 15-18 depend from independent claims 3-7, respectively.

For at least the above reasons, favorable consideration in the form of a notice of allowance is requested. Any questions regarding this communication can be directed to the undersigned attorney, Michael D. Schumann, Reg. 30,422, at 612.455.3800.

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PATENT TRADEMARK OFFICE

Respectfully submitted,

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